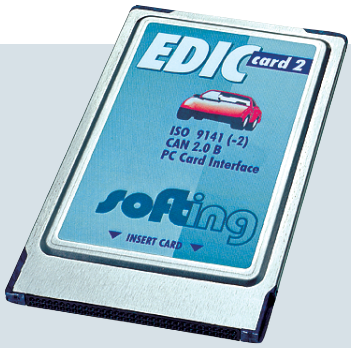
EDICcard2

Multibus PCMCIA Interface for Vehicle Electronics

Data Sheet



Compact Vehicle Interface

K-line and CAN buses in particular are being used in the diagnostic sector with today's ECU applications. It is particularly important in the Engineering, Manufacturing and Service environment to have easy-to-use access to these vehicle buses from your PC. However, the safe and efficient handling of ECU communication is essential, even if communication is taking place on several channels simultaneously. This is particularly true of the flash programming of ECUs.
EDICcard2 is a powerful hardware interface for use in precisely such - particularly mobile - cases. EDICcard2 is software-compatible with other EDIC® interfaces* and can thus also be operated with Softing tools such as DTS, EDIABAS and VAS5163 (for VW applications).

Areas of Implementation and Applications

In the ECU Engineering, Simulation, Test and Validation sectors, the EDICcard2 supports a wide range of communication applications. The vehicle interface enables parallel access to several ECUs via CAN and ISO 9141 – important for diagnostic and test applications. The protocol handling in the interface ensures robust time response and allows fast flash programming of the ECUs. A vehicle interface and several bus adapter cables are available for connection to ECUs.
The wide input voltage range and galvanic isolation enable trouble-free, mobile operation in cars and commercial vehicles as well as in manufacturing environments.

Advantages

Protocol Processing in the Interface
The vehicle protocols are run directly in the interface. This ensures fast response times and reliable real-time behavior regardless of the PC operating system.

D-PDU API
The standardized programming interface provides applications with powerful communication mechanisms and also allows integration into diagnostic systems in accordance with ISO 22900 (MVCI).

Scalability
By combining several EDICcard2 (or even other EDIC® interfaces), the number of communication channels available on the PC system can quickly be adapted to the relevant application.

Flexibility
Various software packages with operating software and additional vehicle protocols, such as Diagnostics on CAN (ISO 15765), UDS (ISO 14229), KWP 2000 (ISO 14230), TP 2.0, as well as many OEM-specific protocols, are available for operating EDICcard2. The support of the relevant bus systems and of the parallel communication channels depends on the operating software used.

An Overview of Features

- Reliable time response due to protocol handling in the interface
- Flexibility due to lots of available vehicle protocols
- Two independent communication channels: 1 x CAN and 1 x ISO 9141 or 2 x CAN (depending on the vehicle interface or bus adapter cable)
- Various bus adapter cables available with different CAN transceivers (high-speed/low-speed) and digital I/O
- D-PDU API software in accordance with ISO 22900-2 available free of charge from Softing via web download

* EDIC is a registered trademark of Softing AG.

softing
Automotive Electronics GmbH

Softing Automotive Electronics GmbH
Richard-Reitzner-Allee 6
85540 Haar, Germany

Tel.: +49 89 4 56 56-420
Fax: +49 89 4 56 56-499
info.automotive@softing.com
www.softing.com

Softing North America, Inc.
29 Water Street, Suite 301
Newburyport, MA 01950
USA

Tel.: +1 978 499 9650
Fax: +1 978 499 9654
info.usa@softing.com
www.softing.us

Data Sheet
Multibus PCMCIA Interface for Vehicle Electronics

Technical Data

Format	PC Card Type II (PCMCIA)
Power supply	5 V (via PC)
Current consumption	Typ. 600 mA (with vehicle interface)
Microcontroller	Infineon C165
Program/data memory	512 kB RAM for operating software (via download)
PC interface	PCMCIA V2.1, 4kB DPRAM (16-bit)
Vehicle interfaces	1 x CAN and 1 x K-line ISO 9141-2 or 2 x CAN (depending on vehicle interface or bus adapter cable)
CAN controller	SJA1000
Temperature range	Operation: 0 ... +55 °C, Storage: -20 ... +65 °C
EMC conformity	■ Noise emission: EN 55022, EN 55011 Class A and EN 61000-6-4 (industrial sector) ■ Interference immunity: EN 61000-6-2 (industrial sector) ■ FCC part 15 subpart B limit A (industrial sector)

Delivery Scope

- EDICcard2 hardware
- User manual
- D-PDU API software ISO 22900-2

System Requirements

- Operating system Windows™ XP, Win 7 from 12/2010
- 4 kB free addressable storage in the upper memory area and one free interrupt

Application Software (optional)

- Diagnostic Tool Set (DTS)
- CANalyzer

Order Numbers / Options

EDICcard2/HW
PC card interface card for ISO 9141-2 and CAN 2.0B

PCcard2-PFX assembly kit and strain relief
Assembly kit and strain relief for the PC card interface connector, increases mechanical stability.

KAB01-ED15-J1962
CARB connector cable (SAEJ1962), length approx. 3 m

KAB04-ED15-LAB
Adapter box for connecting the vehicle signals via banana plugs, length approx. 2 m

EDIC/FZIF-C2/HW (Combi Fahrzeuginterface)
- Vehicle voltage 8 … 32V
- K-/L-line in acc. with ISO 9141, baud rate up to 187 kb
- 1 CAN channel: CAN high-speed in accordance with ISO 11898 or CAN low-speed (transceiver TJA1053), switchable via software
- 2 digital inputs for ignition and battery voltage signal
- 2 digital outputs (open collector), freely available
- 3 status LEDs
- With galvanic isolation between PC and vehicle interface

CANcard2/DHSC bus adapter cable (double high-speed cable)
- 2 CAN channels: CAN high-speed, in acc. with ISO 11898
- 2 D-SUB 9 connectors, in acc. with CiA standard, without galvanic isolation

CANcard2/HLSC bus adapter cable (high-speed/low-speed cable)
- 1 CAN channel: CAN high-speed, in acc. with ISO 11898
- 1 CAN channel: CAN low-speed (transceiver TJA1053)
- 2 D-SUB 9 connectors, in acc. with CiA standard, without galvanic isolation

CANcard2/DLSC bus adapter cable (double low-speed cable)
- 2 CAN channels: CAN low-speed (transceiver TJA1053)
- 2 D-SUB 9 connectors, in acc. with CiA standard, without galvanic isolation

Subject to changes © Softing Automotive Electronics GmbH, D_AE_38E_1011 / V1.02
Non-binding character of the information and reservation of the right of modification: the features described in this product information do not represent any pledged features in a legal sense. The information contained herein may be out-of-date, incorrect or incomplete. All details are thus subject to change and non-binding.

softing
Automotive Electronics GmbH